



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

05/07/1999

05/07/1999

000001

0

200-007950-U

EXAMINER

TMD1/0605

PERMAN AND GREEN
425 POST ROAD
FAIRFIELD CT 06430-6232

GANTT, A

ART UNIT

PAPER NUMBER

06801

DATE MAILED:

06/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

TS

Office Action Summary

Application No.
09/074,093

Applicant(s)
Conway Robert Shaw

Examiner
Alan Gantt

Art Unit
2684



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Mar 23, 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:

- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____.
- ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other:

Art Unit: 2684

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 3/23/01 have been fully considered. Applicant primarily argues that:

- a. References do not disclose or suggest a structure for an antenna that is biased and adapted to be locked as the antenna pivots.

Regarding (a), For this amendment the applicant has revised each independent claim to include the phrase "the antenna being biased and adapted to be locked as the antenna pivots".

Therefore, a new reference (Podgorny et al. - UK Patent Application GB 2018033 A) has been added to meet this limitation.

Claim Rejections - 35 U.S.C. § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2684

3. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rydbeck, in view of Podgorny.

Regarding claims 1, 2, 4, 5, 7-12, 17, 18, 21, 22, and 27; Rydbeck discloses a canted antenna for a cellular radiotelephone that is movable between a first position and a second position. In the first position, the antenna is substantially parallel to the face of the radiotelephone. In the second position, the antenna is canted away from the face of the radiotelephone thus increasing the distance from the user's head and the antenna during use (col.1, lines 56-67). The angular orientation caused by the second position defines an arrangement of the antenna and the radiotelephone such that the axis and the imaginary plane defined by the extended front face of the radiotelephone form an acute angle. Thus, the antenna moves through this acute angle from the first position to the second position when observed along the plane joining the first and second position (col. 2, lines 10-27). The first position is also thought of as a storage position and reduces the profile of the radiotelephone (col. 3, lines 4-10). Rydbeck makes use of a boss having an angled surface connecting one end of the antenna to permit the movement from the first position to the second position. Rydbeck does not utilize a pivot to permit single plane movement between the two positions, nor is the antenna biased and adapted to be locked as the antenna pivots.

Podgorny is directed to systems of antenna orientation with respect to a transmitting radio station and to pivotable non-retracting rod antennas and teaches pivoting in a vertical plane. There is provided a support for a pivotable rod antenna comprising an antenna tip encased in a

Art Unit: 2684

housing mounted so as to be pivotable about a transverse pivot and is provided with an antenna tilt locking device provided with a stopping member which is spring loaded toward the surface of one of the recesses of the housing unit (page 1, lines 20-45). Thus, like the applicant's device the antenna is biased and adapted to be locked as the antenna pivots. The Podgorny reference utilizes numerous embodiments as seen in Figures 1-20 and would be readily adaptable to being encased in a mobile phone system. The Podgorny invention pre-dates the modern mobile telephone station but lends itself to projecting from the surface of the telephone housing. The mechanism of Figures I and 15-20 show the means for vertical movement of the antenna between definite position as called out in applicant's invention and can be constructed to insure maximum acute angle of the antenna in a single plane.

Rydbeck and Podgorny are combinable because they share a common endeavor, namely, radio transmitting stations that incorporate antennas that project outward from the station. At the time of the applicant's invention, it would have been obvious to modify Rydbeck to use the antenna movement that is vertical, in a single plane biased and adapted to be locked as the antenna pivots as done by Podgorny. The motivation to combine would have been to provide greater simplicity and an improvement in antenna movement of the Rydbeck device.

Regarding claims 3, 6, 19, and 20, depending on the hinging configuration of Podgorny, as well as the groove configuration, the antenna will tend to be moved towards one or both positions.

Art Unit: 2684

Regarding claim 13, as seen in the Figures 1 and 15 if the antenna structure is mounted at the top surface of the mobile station housing the plane of rotation will be perpendicular to the front of the radio telephone.

Regarding claim 14, helical antennas are known to be configured inside housing as the one illustrated in Rydbeck and they are known to have the flexibility to make this canted position possible and the Podgorny antenna is non-retracting. Therefore, it would have been obvious for Rydbeck to utilize helical antenna structures in canted antenna radio telephones because of their physical flexibility and strong availability in the industry.

Regarding claim 15, Rydbeck's preferred embodiment provides for the phone's speaker to be positioned on the phone's front face and mounted adjacent to the top edge [the edge where the antenna is located] (col. 3, lines 35-46).

Regarding claim 16, Rydbeck's preferred embodiment, as is typical with radiotelephones, places the microphone at the bottom of the front face, away from the antenna at the top (Figure 2 and col. 3, lines 35-46).

Regarding claim 22, Podgorny utilizes stop members for holding positions between a first and last position.

Regarding claims 23-26, Podgorny permits construction (as in the figures of the various embodiments to perform biasing and permit locking in a wide variety of positions.

Art Unit: 2684

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication from the examiner should be directed to Alan Gantt at telephone number (703) 305-0077. The Examiner can normally be reached between 8:30 a.m. and 5:00 p.m. EDT. The group FAX number is (703) 872-9314.

Any inquiry of a general nature or relating to the status of the application should be directed to the group receptionist at telephone number (703) 305-4700.


Alan Gantt

June 1, 2001


DANIEL HUNTER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600